

Job Hazard Analysis (JHA)

Job Hazard Analysis

Overview

- **Regulatory Requirements**
- **Goals and Benefits**
- **Some dull**
but fundamental theory_
- **How to start JHA**

Job Hazard Analysis

The requirement to perform Job Hazard Analysis has been implemented by:

Army in Europe 2005-2006 Winter Safety Campaign Memo,
15 Aug 05
& ERM/ERDC 2005-2006 Winter Safety Campaign Memo,
19 Sep 05

“Conduct job-hazard analyses for **civilian and local national employees** according to the USAREUR 2005 Summer Safety Campaign. The overall target date for completing these analyses is 30 September 2006.” Procedures are at:

http://www.per.hqusareur.army.mil/services/safetydivision/usareur_winter_saty_campaign.htm

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Job Hazard Analysis

Job Hazard Analysis is required by:

**Code of Federal Regulations, Title 29, part
1910.132,**

subpart I; DODI 6055.1 E3.6.3;

AE Regulation 385-29, and AE Pam 690-40

“Supervisors at all levels are responsible for conducting job-hazard analyses for DA and local national civilian employees.”

Job Hazard Analysis

German Law

ArbSchG § 5 Evaluation of Working Conditions

- (1) “The employer has to determine which occupational protection measures are required by evaluating the hazards arising for the employees in connection with their work.
- (2) The employer has to perform his evaluation based upon the type of activity. In case of similar working conditions, the comparison of one work

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Job Hazard Analysis

German Law

- **Inform and involve employees ...**
 - **promote employee buy-in to your measures, listen to their work experience**
 - **Comply with the legal rights of employees to make suggestions (§ 17 Occupational Safety Law)**
 - **Obtain consent and support from your Works Council**
- **Involve Subject Matter Expert (SME)**
 - **Safety Professionals must advise the: employer regarding JHA on technical and organizational aspects; Occupational Physician ... on medical aspects, and the**

Job Hazard Analysis

Goal of the USAREUR Campaign.

The goal is to perform and document job-hazard analyses on 25 percent of civilian US and Local National employees each fiscal quarter, reaching 100 percent by 30 September 2006.

Job Hazard Analysis

What is a Job Hazard Analysis?

JHA is the process of recognition and evaluation of accident and occupational health impairments in the workplace with the intent to develop countermeasures to mitigate hazards.

... more simply ... JHA is:

- **A systematic process**
- **Looking for work-related accident and health risks**
- **Analyzing them**
- **Developing preventive measures**

Job Hazard Analysis

Purpose.

JHA supports the proper selection and design of **work material, equipment, machinery, tools, procedures, and work places** in order to minimize/eliminate organizational/technical deficiencies and failures.

Job Hazard Analysis

Factors to consider when performing JHA.

- **Hazard types**
- **Who might be affected?**
- **Are working conditions acceptable?**
- **Rules and Regulations**
- **State of the Art Technology**

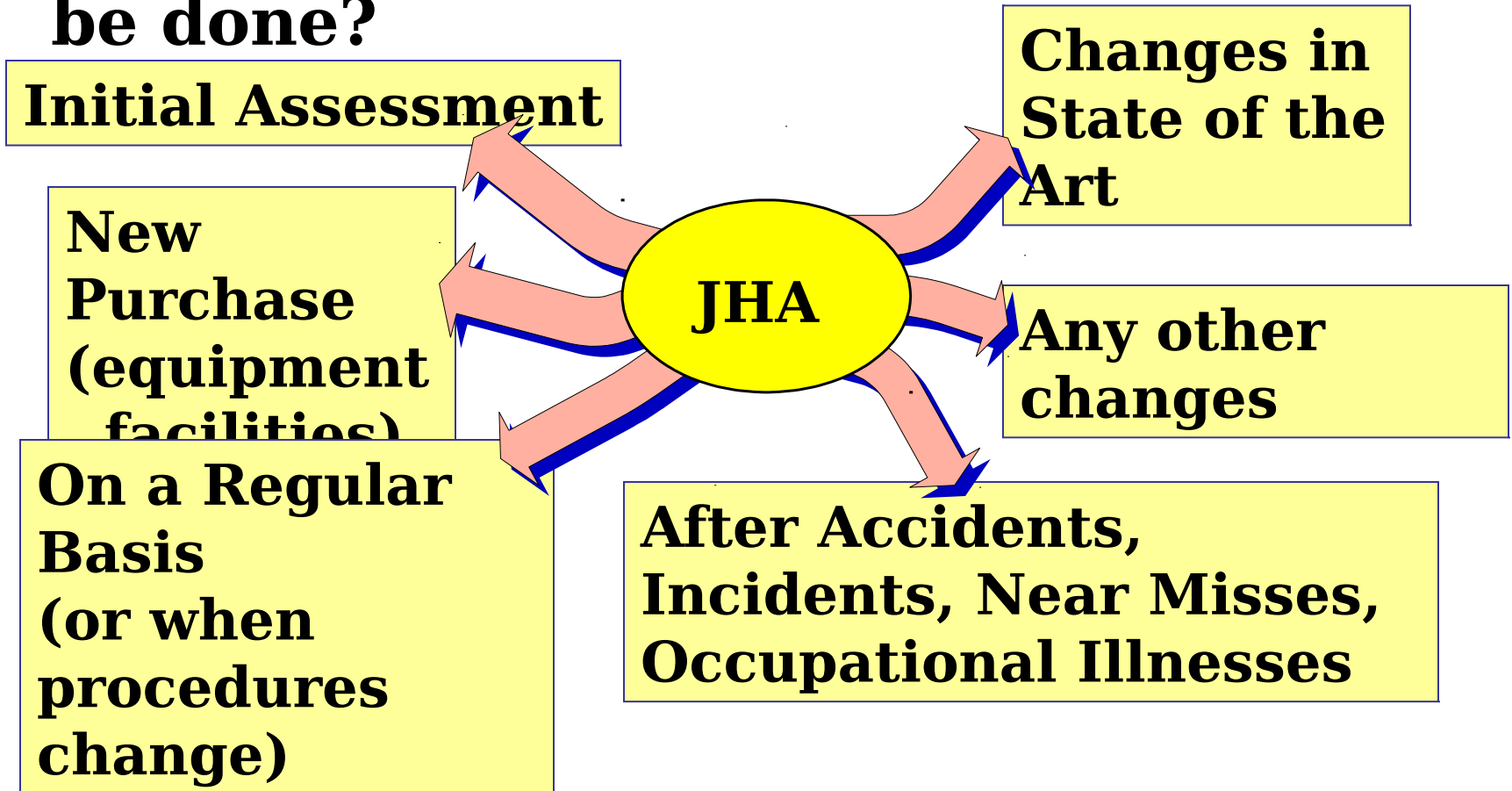
Job Hazard Analysis

Hazard Categories

<u>Chemical</u>	<u>Physical</u>	<u>Biological</u> (Infection Risk)	<u>Ergonomic</u>
Mist, Vapor	Noise, Vibration Mechanic	Bacteria	Monotony
Gas, Smoke	Temperature Pressure	Virus	Work Pressure
Dust, Aerosol	Illumination Electrical	Fungus	Overload Physical
Fume	Radiation Ionizing & Non-ionizing	Parasites	Metabolic Cycles

Job Hazard Analysis

When should a Job Hazard Analysis be done?

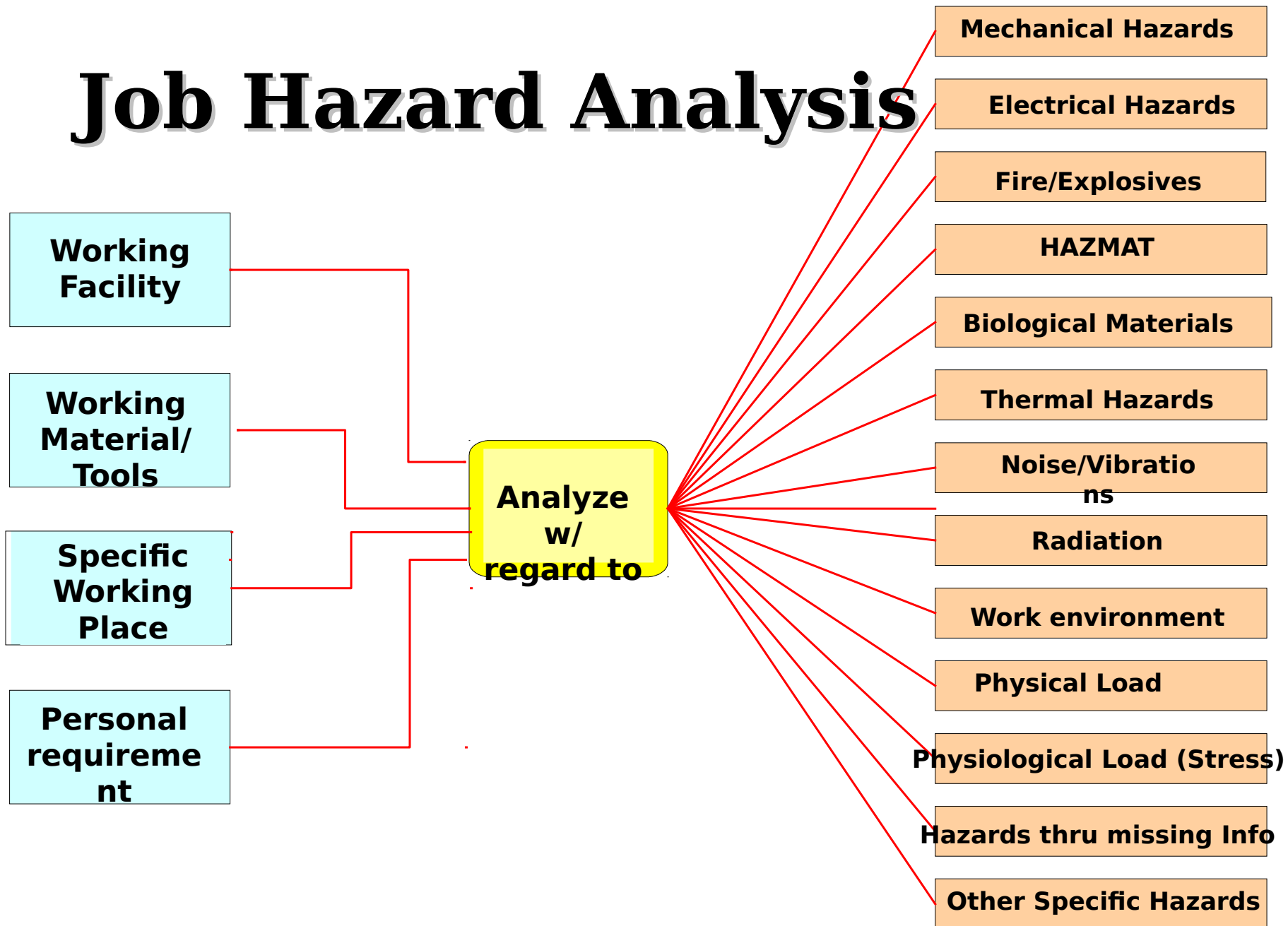


Job Hazard Analysis

Hazards can arise from:

- The organization of the work and production process, work procedures, workhours, and the interaction of these elements
- The layout of the workplace or workstation
- Materials: Physical, chemical, and biological factors
- Machinery
- Equipment and facilities
- Inadequate qualification and insufficient instruction of employees

Job Hazard Analysis



Job Hazard Analysis

1

Identify JHA Procedure

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- **Determine evaluation type (Breakdown):**
Work areas - work activities performed - occupations - people
- **Who is participating?:** Management - SME
- **Inform employees** about J.H.A. goals and approach

2

Identify Hazards

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Identify hazards in regard to **work facility**:
e.g. illumination, heating, traffic ways,
emergency escape routes, fire protection,
walking surfaces.

Job Hazard Analysis

2

Identify Hazards (continued)

... in regard to **occupation:**

Identify which operation/process, material and equipment are used in which work areas and identify the possible resulting hazards.

... in regard to **work material, equipment, tools:**

Check manufacturer/vendor-provided safety features and protection devices.

... in regard to **persons:**

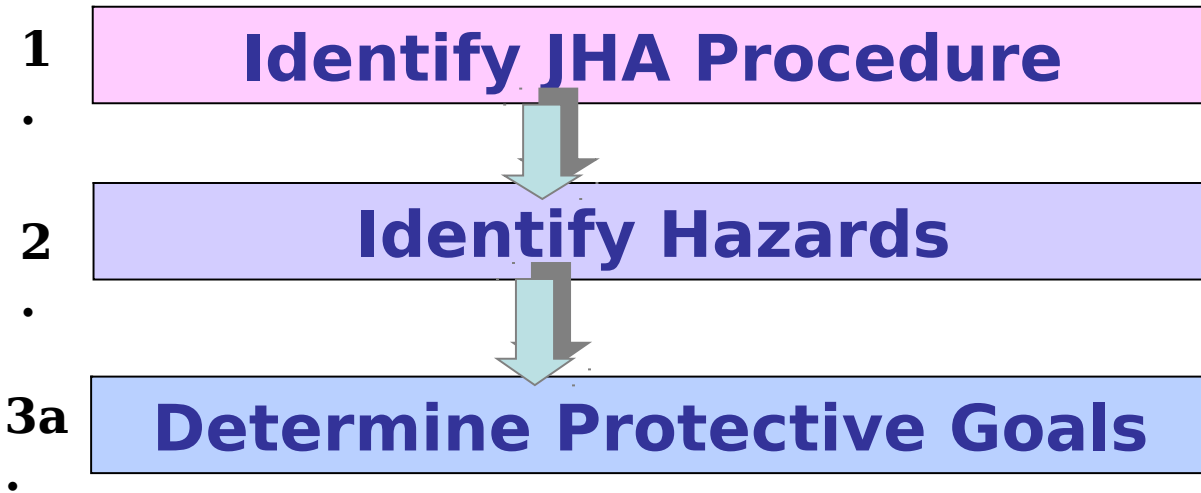
Identify which people (groups and individuals) may be affected by which hazards.

Consider people with special protection needs as well.

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Job Hazard Analysis



- Analyze identified hazards thru comparison with safety and health goals to be achieved:
Comparison with normative protection goals:
e.g. laws, ordinances, regulations
Best practices ensuring safe and healthful execution
Physical examinations

Job Hazard Analysis

3b.

Measures

JHA should enable you to:

- **Determine if existing safety and occupational health precaution measures are sufficient or not.**
- **Establish Hazard mitigation principles.**
- **Establish working procedures in such a way that hazards do not exist, eliminate hazard at source.**

Job Hazard Analysis

3b.

Measures

1. Hazard mitigation thru **technical measures**:
 - Use of hazardless technique or harmless materials
 - Changes in technology and Automation
 - Use of technical tools
 - Use of technical protection devices (Guards)
2. Hazard mitigation thru **organizational/administrative measures**
 - Safety and Occupational Health management to include: Responsibilities, equipment checks, PPE supply and control, SOPs
 - Training
 - Change of work processes/procedures/task delivery/work schedule
3. Hazard mitigation thru **personnel measures**
 - Use of PPE
 - Signs, labels, warning signals, instructions

Job Hazard Analysis



Job Hazard Analysis

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Control

(1) You need to document and control the measures taken indicating timeline and the person responsible.

(2) Examine Measures for effectiveness and document:

- J.H.A. Results
- Technical or organizational measures
- Physical examinations so far required or optional
- Priorities (time-line for implementation, correction)

USAF Based MED Brigade Safety

Responsible (Offices, Officers)

Legally required

Job Hazard Analysis



Job Hazard Analysis

1st Step: Break Down Work Areas - Work Activities Performed

2nd Step: Identify Hazards - What may result in hazards?

3rd Step: Determine Protective Goals. What is the goal?

4th Step: Specify protective measures to be taken. What to do, until when, where do I need Subject Matter Expert (SME) advice?

5th Step: Examine Measures for effectiveness.

Now ask: USAMH and 30 MED Brigade Safety
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WORKPLACE BEFORE JHA



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JHA for making coffee

Look at....

Work Place / Work Environment:

Materials

Equipment

Operation/process

Occupations/Personnel

Workers capabilities /needs

JHA for making coffee

- Work Place/Work Environment
e.g. Space, Illumination
- Materials: e.g. Milk, coffee, sugar
- Equipment:
Electricity, Technical inspections, Equipment Parts, Coffee Pot
- Operation/process: Job tasks; filling water reservoir, filling coffee filter, turning on coffee pot
- Workers capabilities /needs:
Adequate reach to all materials and equipment
Can lift equipment
Any allergies to coffee, sugar or milk

JHA for making coffee

Category /Job Task	Questions to ask	Y	N	Hazards	Measures	Action by	Until
Work Environment/Workplace	Is illumination sufficient for the work place?	Y					
	Is the workplace sufficient in height, space?		N	Coffee machine may fall from height while being used	Relocate Coffee machine to new space (top of Refrigerator)		
Electrical	Are connectors /plugs in proper conditions (No exposed wire)		N	Broken plug on coffee pot	Replace broken plug		
	Are electrical cords bundled and secured out of the way of the operation		N	Coffee pot can be pulled off shelf, spilling hot liquids	Neatly bundle and/or secure cords out of the way.		
Biological	Is the milk stored to prevent spoiling		N	Spoiled milk	Keep milk in refrigerator		

WORKPLACE AFTER JHA



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Questions ?